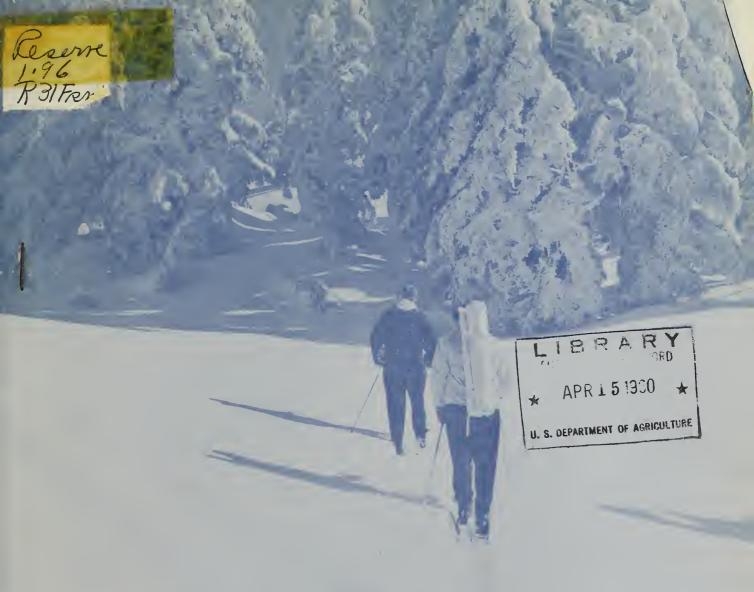
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FEDERAL - STATE - PRIVATE

SNOW SURVEY and WATER SUPPLY FORECASTS for NEVADA

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE, and

NEVADA DEPARTMENT of CONSERVATION and NATURAL RESOURCES
DIVISION of WATER RESOURCES

Data included in this report were obtained by the agencies named above in cooperation with the Federal, State and private organizations listed on the last page of this report.

APR. 1, 1960

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	LOCATION	COOPERATING WITH
RIVER BASINS			
Colorado and State of Utah	_MONTHLY (JANMAY)		UTAH STATE ENGINEER AND OTHER AGENCIES
Columbia and States of	MONTHLY (JANMAY)	BOISE, IOAHO	IOAHO STATE RECLAMATION ENGINEER
UPPER MISSOURI AND STATEOF MONTANA	MONTHLY (FEBMAY)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
WEST-WIDE	OCT. 1. APR. 1. MAY 1	PORTLANO, OREGON	ALL COOPERATORS
STATES			
ARIZONA	SEMI-MONTHLY (JAN. 15 - APR. 1)		SALT R. VALLEY WATER USERS ASSOCIATION ARIZ. AGR. EXP. STATION
COLORADO ANO NEW MEXICO	MONTHLY (FEBMAY)		COLO. AGR. EXP. STATION COLO. STATE ENGINEER N. MEX. STATE ENGINEER
NEVAOA	MONTHLY (FEBAPR.)	RENO, NEVAOA	NEVAOA DEPT. OF CONSERVATION ANO NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JANMAY)		ORE. AGR. EXP. STATION 'OREGON STATE ENGINEER
WASHIN GTON	MONTHLY (FEBMAY)	SPOKANE, WASHINGTON	WASH. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB JUNE)	CASPER. WYOMING	WYOMING STATE ENGINEER
Copies of these various	reports may be secured	from: Head, Water Suppl Soil Conservation 209 S. W. Fifth A	y Forecasting Section a Service ave., Portland 4, Oregon
	PUBLISHED BY 01	THER AGENCIES	
REPORT	ISSUED	<u>A.C</u>	SENCY
BRITISH COLUMBIA	MONTHLY (FEBJUNE)	COMPTROLLER, WATER AND FORESTS, PARL CANADA	R RIGHTS BR., DEPT. OF LANDS IAMENT BLOG., VICTORIA, B.C.,
CALIFORNIA	MONTHLY (FEBMAY)	CALIFORNIA DEPT. C	F WATER RESOURCES. SACRAMENTO

FEDERAL - STATE COOPERATIVE SNOW SURVEYS AND WATER SUPPLY FORECASTS

For

NEVADA

Report Prepared

By

Manes Barton and Roy E. Malsor, Jr.

Soil Conservation Service 1479 Wells Avenue Reno, Nevada

Issued By

Charles W. Cleary, Jr.
State Conservationist
Soil Conservation Service
Reno, Nevada

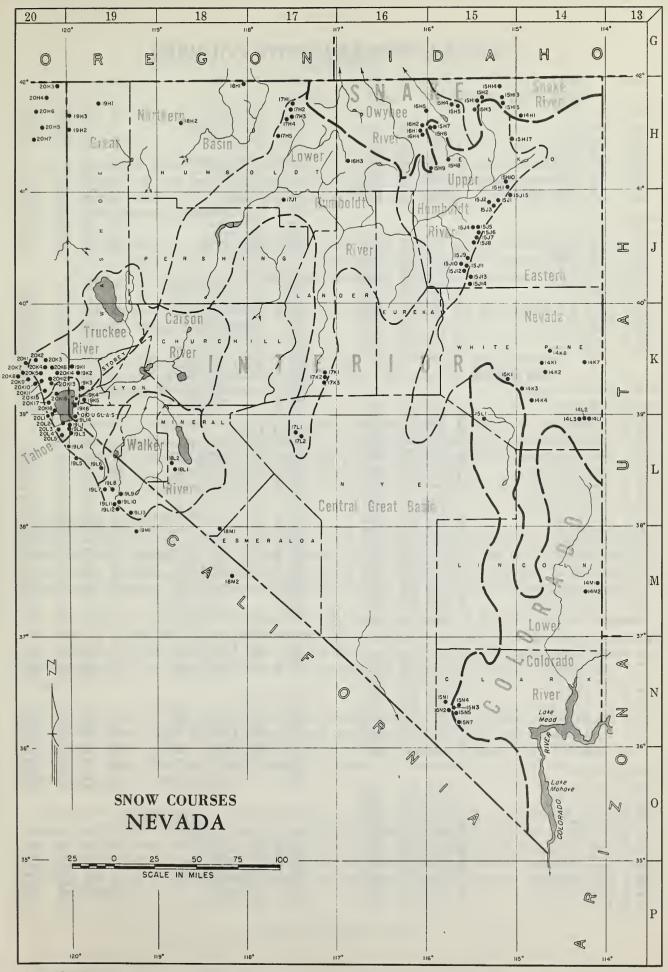
Hugh A. Shamberger, Director Department of Conservation and Natural Resources Carson City, Nevada



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Number				00 1	. 1 1 7 1 1	DA SIVI	J 77 (COURSES				
NOMBER	NAME SNAKE RIVER	S	EC. TW	P. RGE	. ELEV.	NUMBER		NA ME	SEC	. Twe	. Ref	E. c.
SNAKE R		BA	SIN			CENTRA	L GREA	T BASIN				
15H 1						15N 2	CLARK	CANYDN H SPRINGS DMERY PASS TO MTN	8	195	5 56E	9000
15H 2	FOX CREEK	3	31 461 33 461	N 58E	7800 6800	18M 1	MDNTG	DMERY PASS	23	185	5 5 5 E	8500 7100
15H 5*	GDLD CREEK	3	6 441	58E	7100	18M 2	CAMPI	TO MTN	19	55	35E	10200
15H 4*	BEAR CREEK FOX CREEK 76 CREEK GOLD CREEK BIG BEND GOAT CREEK POLE CREEK RANGER STAT	3	30 451	56E	6700	NORTHE	RN GRE	AT BASIN				
15H14 15H15	POLE CREEK RANGER STAT	10N 1	3 461	5 9E	8800 8330	18H 1	DISAS	MOUNTAIN TER PEAK	17	45N	21E	6720
1 4H 1	HUMMINGBIRD SPRINGS JAKES CREEK		6 421	60E	8945 7000	18H 2 19H 3	LEONA 49-MT	RD CREEK N	13	42N	28E	6500 59 0 0
0.11/2/11/5						19H 2 20H 4	HAYS	AT BASIN MOUNTAIN TER PEAK RD CREEK N CANYON VATION CREEK R CREEK PASS L SWAMP PEAK	1	42N 39N	19E 18E	6000 6400
17H 2*	RIVER LOWER BUCKSKIN UPPER BUCKSKIN MARTIN CREEK GRANITE PEAK GOLD CREEK BIG BEND FRY CANYON RODED FLAT LOWER JACK CREEK UPPER JACK CREEK TREMEWAN RANCH TAYLOR CANYON JACKS PEAK LAUREL DRAW	2	5 45N	39E	6700	2 OH 5	BARBE	R CREEK	12 23	46N 39N	15E 16E	5900 6500
17H 3*	MARTIN CREEK	1	1 45N 8 44N	3 9E 4 0E	72 00 67 00	20H 3	DISMA	L SWAMP	12 31	43N 48N	14E	7100 7000
15H 5	GDLD CREEK	2	2 44N 1 45N	3 9E 5 6 F	7800 6600	20H /	EAGLE	PEAK	35	40N	1 5E	8300
15H 7*	FRY CANYON	3	0 45N	56E	6700	LAKE TA	HOE					
15H 6*	RDDED FLAT LOWER JACK CREEK	3	6 43N	53E	67 00 68 00	20L 4 20L 1	(CAL.	LAKE LUCILLE	28	12N	17E	8400
16H 2 15H 8*	UPPER JACK CREEK TREMEWAN RANCH		9 42N	53E	6800 7250 5700 6200 8420 6700	19L 3	(CAL.	HAGANS MEADDW	36	13N 12N	17E 18E	8100 8000
15H 9 16H 4	TAYLDR CANYON	35	39N 39N	55E 53E	5700 6200	2 0K17	(CAL.)	WARD CREEK	36 21	12N 15N	18E	7300 7000
16H 5	LAUREL DRAW	2 8	3 42N 3 45N	53E 53E	8420	20K16	(CAL.)	TAHDE CITY	21	12N	18E	6400
				332	0700	20K18	(CAL.)	RUBICON #2 RUBICON#3	6	13N	17E	6250 7500
	INTERIC	R				20L 3 20L 5	(CAL.)	LAKE LUCILLE RUBICON #1 HAGANS MEADDW FREEL BENCH WARD CREEK UPPER TRUCKEE TAHDE CITY RUBICON #2 RUBICON #3 RICHARDSDNS #2 ECHD SUMMIT MARLETTE LAKE DAGGETTS PASS GLENBRDDK #2 MT. RDST	6	1 2N	18E	67 00 65 00
15H 1*	JMBOLDT RIVER BEAR CREEK					19K 4 19L14		MARLETTE LAKE	13	15N	1 8E. 1 8E	7500 8000
15H 2*	MBOLDT RIVER BEAR CREEK 76 CREEK 76 CREEK GOLD CREEK BIG BEND FRY CANYON RODED FLAT OWER JACK CREEK JPPER JACK CREEK JPPER JACK CREEK IREMEWAN RANCH CAYLOR CANYON OWER TROUT CREEK JPPER TAUT CREEK JPPER TROUT CR	31 33	46N	58E	7800 6800	19K 6		GLENBRODK #2	13	1 3N 1 4N	1 9E 1 8E	7350 6900
15H 5*	76 CREEK Gold Creek	6	44N	58E	7100			MII. RDS	7	17N	1 9E	9000
15H 4* F	BIG BEND FRY CANYON	30	45N	56E	66 00 67 00	TRUCKEE	RIVER	luana				
15H 6 F	RODED FLAT	36	43N 43N	54E 53E	67 00 68 00	20K 1*	(CAL.)	WEBBER PEAK	9 3 0	1 8N 1 9N	15E	8450 8000
16H 2* [JPPER JACK CREEK	18	42N 42N	53E 53E	68 00 725 0	20K10*	(CAL.)	DONNER SUMMIT WARD CREEK	25	17N	14E	6900
15H 9* T	TAYLOR CANYON	9 35	3 9N 3 9N	55E	57 00 62 00	2 OK 2 2 OK 6	(CAL.)	WEBBER LAKE SAGE HEN CREEK	20	1 9N	14E	7000 7000
15H11 L	-OWER IRDUT CREEK JPPER TRDUT CREEK	28	37N	61E	6900	20K16* 20K13	(CAL.)	TAHDE CITY	6	1 8N	16E 17E	65 00 625 0
15J 1 D	DRSEY BASIN	28	35N	6 0 E	8500 8100	20K 3	(CAL.)	INDEPENDENCE CREEK	22 < 14	17N 19N	16E 15E	6400 6500
15J 3 D	RY CREEK	5	34N 34N	59E 60E	58 00 65 00	20K 8*	(CAL.)	FURNACE FLAT	28	18N 17N	17E	5900 6600
15J 5 L	AMDILLE #2	15 14	32N 32N	58E	7100 7300	20K 7* 20K 9*	(CAL.)	FORDYCE LAKE SODA SPRINGS	34	1 8N	13E	6500
15J 7 L	AMDILLE #3	24	32N	58E	7700 8000	20K 4 19K 2	(CAL.)	INDEPENDENCE CAMP	34	19N	1.5E	675 0 7 000
15J 8 L 15J 9 G	AMDILLE #5 REEN MOUNTAIN	31	32N	59E	8700	2 0 K 1 2 2 0 K 1 1	(CAL.)	TRUCKEE RANGER STA	.10	1 / N 1 7 N	19E 16E	9000 6000
15J10 H	ARRISON PASS #1	9	2 8N	57E	8000 6600	1 9K 1	(CAL.)	BIG MEADOWS	1.4 1.5	1 7N I 8N	15E 18E	5950 8800
15J12 C	ORRAL CANYON	27	28N 28N	57E 57E	7400 8500	20K15	(CAL.)	LITTLE VALLEY SOUAW VALLEY	17 1	6N	19E	6300 7500
LOWER HUM	BOLDT RIVER					CARSON R	IVER	INDEPENDENCE LAKE WEBBER PEAK DDNNER SUMMIT WARD CREEK WEBBER LAKE SAGE HEN CREEK TAHDE CITY TRUCKEE #2 INDEPENDENCE CREEP BDCA #2 FURNACE FLAT FDRDYCE LAKE SODA SPRINGS INDEPENDENCE CAMP MIT. ROSE TRUCKEE RANGER STA BODNER LAKE SODMA SPRINGS LITTLE VALLEY SOUAW VALLEY			101	7500
17H 2 Lo	DWER BUCKSKIN	25	45N	3 9 F	6700							
17H 3 MA	ARTIN CREEK	1.1	45N	39E 10E	7200 6700		(CAL.) F	CARSON PASS Poison Flat Blue Lakes	25			8600 7900
17H 5 LA	RANITE PEAK AMANCE CREEK		44N	39E	7800	19K 5	(LEAR CREEK			9E 19E	8000 7300
16H 3 MI	IDAS IG CREEK CAMP GROUND	18	3 9N	38E 16E	6000 7200	WALKER R						
178 2 91	G CREEK MINE	23	17N Z		66 00 76 00	19L12 (CAL.)	ENTER MOUNTAIN DNORA PASS			3E	9400
174 1 40	WER CORRAL PER CORRAL				8000 7500	19111 (CAI.) R	HCKEYE EDDKE			1E 3E	8800 8500
17J 1 Go	LCDNDA	2 O 2 2	11N 4	1E	8500	19L 9 (CAL 1 W	TILLOW FLAT	5	2N 2	5Ē	9500
EASTERN NE	E V A D A		0 011	91	6000	19L10 (Cal.) B Cal.) L	UCKEYE ROUGHS	15 .	4N 2	3E	8250 7900
15J15 HD	LE-IN-MTN	6	2511			19M 1 * (CAL.) T	IOGA PASS	30	5N 2	5E	7200 9900
15J13 CA	VE CREEK GER CANYON	25	27N 5	7E	7900 7500	18L 2	М	T C		BN 2 BN 2		9000 9000
14K 3 MU 14L 1 BA	RRAY SUMMIT		16N 6	2E	8000 7250							
14L 2 BAI	KER #2				795 0 89 50			COLORADO				
14L 3 BA 14K 2 BE	RRY CREEK	25	13N 6	8E	9250 9100	LOWER COL						
14K 1 BII	RD CREEK BINSON SUMMIT	34	19N 6	5E	7500	15N 5 K1 15N 4 Le	E CANYI	ON #1	26 19 10 19	_	-	3200
14K 4 WAR	RO MOUNTAIN	25	15N 6	2E :	76 0 0 7875	15N 3 Le 15N 7 RA	F CANYI	N #2	9 19	S 56	SE g	300
14K 8 KAL	LAMAZDD CREEK	34	16N 6 20N 6		3000 7400	14M 1 MA	THEW CA	NYDN	6 20 11 5		'Ε ε	100
IJL I WHI	ITE RIVER #1				7400	14M 2 P) 15L 1 WH	ITE RIV		11 6 31 13	S 69	<u>E</u> 6	200
										59	_ /	400

WATER SUPPLY OUTLOOK FOR NEVADA

April 1, 1960

* Nevada's water supply outlook did not improve during the past * month and can be rated only fair to poor. Snowfall was below - * normal except for near normal snowfall at higher elevations in * northeastern Nevada. * Unseasonably high temperatures and warm winds, particularly in * the Sierras, have caused much snowmelt at elevations below 7500 * * feet. Dry mountain soils have absorbed much of this snowmelt. * Irrigation reservoirs are low, containing only 58 percent of * normal April 1 storage. * Range conditions are fair and could improve with supplemental * spring rainfall, particularly if the rains occur before the * rangeland soils dry out. * Careful management of this years limited water supply by Nevada * * water users, through efficient irrigation practices, plus some * * conversion to lesser water-using crops should provide the most * * beneficial use of the spring-summer water supply.

STREAMFLOW FORECASTS

With few exceptions, April 1 forecasts of irrigation season water supply have been revised downward from those given a month ago. This is due to the generally below normal snowfall which occurred during March. Most key high elevation snow courses did not receive their normal March water content increases.

The April-July streamflow forecasts range from a high of 71 percent of normal for Martin Creek at Paradise to a low of 20 percent of normal for the Humboldt at Palisade. Forecasts for the Owyhee River near Gold Creek and near Owyhee were raised slightly with 59 and 62 percent of April-July normal flow now expected.

The Truckee Basin Water Committee forecasts a rise of 0.85 foot from April 1 for Lake Tahoe which with gates closed would allow the Lake to reach an elevation 6226.6 feet. April-July flow of the Little Truckee is forecast to be 54,000 acre feet and the Truckee at Farad is forecast to flow 160,000 acre feet during the same period.

Streamflow in the Walker River Basin is forecast to be 41 percent of the April-August normal on the East Walker and 58 percent of normal for the April-July period on the West Walker. Carson River forecasts range from highs of 61 and 65 percent of the April-July normal on the east and west fork stations, respectively, to lows of 52 percent and 44 percent for the Carson at Carson City and Ft. Churchill.

(Over)

A new type forecast for the East Carson at Gardnerville indicates that the river should drop to a flow of 200 c.f.s. on July 7. Continuation of the present weather pattern would cause this date to occur nearer July 1.

RESERVOIR STORAGE

Storage in Nevada's principal reservoirs is much below normal. These reservoirs now hold 58 percent of normal April 1 storage. Since October 1, 1959 the beginning of the water year, these reservoirs with a total useable capacity of 1,372,000 acre feet have gained 101,000 acre feet. They now contain 592,000 acre feet compared to 491,000 acre feet on October 1, 1959.

SOIL MOISTURE

Mountain soils increased in moisture content during the past month. This has been brought about by the melting snow, particularly at medium elevations. Mountain range soils and range forage will benefit from this moisture, but spring-summer streamflow will be less due to the losses into the soils of snowmelt water.

SNOW COVER

Water content of the snow increased in the major river basins throughout the State during the month of March. However, these increases were generally below normal. At medium elevations below 7,500 feet appreciable snowmelt took place. In the Tahoe Basin about 70 percent of a normal April 1 winters snow-pack had accumulated. The comparable figures in the Walker, Carson and Humboldt River Basins were 71, 77, and 78 percent respectively.

NEVADA STREAMFLOW FORECASTS - APRIL 1, 1960

The following summarized runoff forecasts are based principally on mountain snow cover and the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts.

	April-July	, Streamf	low Thousan	nds Acre	Feet
		15-Yr.	1960 as		
Flavor and Church	Forecast	Av.	% of		ed Runoff
Forecast Stream	1960	1943-57	15-Yr.Av.	1959	1958
Owyhee River nr. Gold Creek, Nev.	16	27	59	7	37
Owyhee River nr. Owyhee, Nev.	55	86	64	16	110
Lamoille Creek nr. Lamoille, Nev.	18	28	64	13	29
So. Fk. Humboldt nr. Elko, Nev.	35	74	47	10	77
Humboldt River at Palisade, Nev.	45	225	20	20	228
Martin Creek nr. Paradise, Nev.	12	17	71	6	30
East Walker nr. Bridgeport, Cal. 2	25	61	41	18	125
West Walker nr. Coleville, Cal.	86	148	58	81	218
East Carson nr. Gardnerville, Ne	v. 115	189	61	96	276
West Carson at Woodfords, Cal.	35	54	65	27	84
Carson River nr. Carson City	95	184	52	55	298
Carson River at Ft. Churchill	75	171	1+1+	40	274
Little Truckee River above Boca, California 5	54	86*	63	32	169
Truckee River at Farad, Cal. 3,5	160	255	63	109	456
Lake Tahoe ⁴ ,5	.85	1.50	57	0.44	2.58
Salmon Falls Creek nr. San Jacinto, Nevada	60** 58***	88 85	68 68		87 84

^{1.} Corrected for storage in Wild Horse Reservoir.

^{2.} For period April through August corrected for storage in Bridgeport Reservoir.

^{3.} Exclusive of Tahoe and corrected for storage in Boca Reservoir.

^{4.} Maximum rise, in feet, from April 1, assuming gates closed.

^{5.} Forecast issued by Truckee Basin Water Committee which is composed of Truckee-Carson Irrigation District, Sierra Pacific Power Company and Washoe County Water Conservation District.

^{*} Subject to change due to questionable streamflow data.

^{**} Forecast period of March-September.

^{***} Forecast period of March-July.



NEVADA

STATUS OF RESERVOIR STORAGE

APRIL 1, 1960

USABLE STORAGE - 1000 ACRE FEET USABLE APRIL 1									
BASIN STREAM	RESER VOIR	CAPACITY (1.000 AF)	1960	1959	1958	15-YR. AVE. 1943-57			
Owyhee	Wild Horse	33	13	23	22	17			
Lower Humboldt	Rye Patch	179	28	123	100	115			
Colorado	Mohave	1,810	1,568	1,703	1,738	1,492*			
Colorado	Mead	27,217	19,171	20,735	19,092	16,437			
Tahoe	Tahoe	732	330	563	630	473			
Truckee	Boca	41	22	2	7	9			
Carson	Lahontan	286	158	254	234	229			
West Walker	Topaz	59	18	57	38	45			
East Walker	Bridgeport	42	23	43	37	35			

^{*} Storage began in 1950.



SNOW WATER ACCUMULATION in NEVADA by BASIN

APRIL 1, 1960

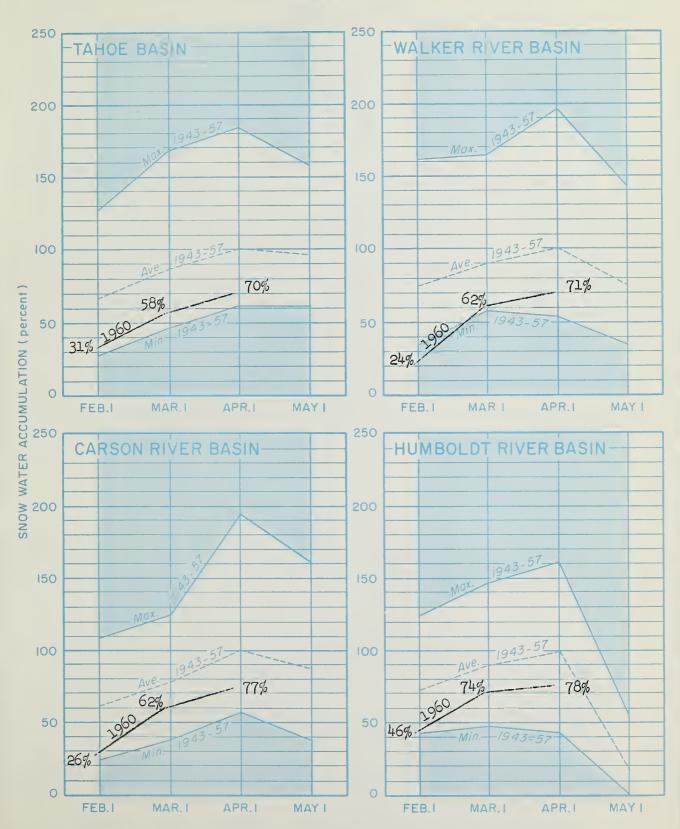
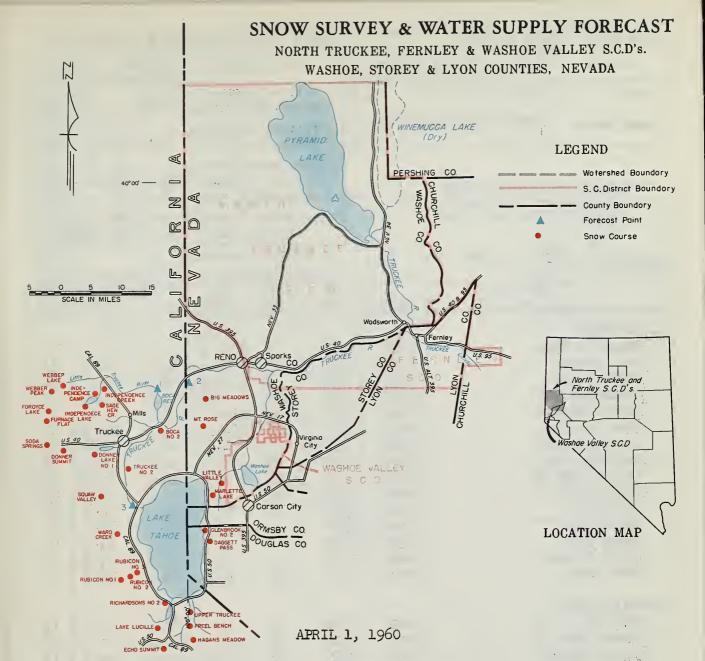


Plate 1





The water supply outlook in the Tahoe-Truckee basin did not improve during the month of March. Usually about 14 percent of a normal winter's snowpack accumulates during March. This year 12 percent accumulated. The present snowpack is 62 percent of the April 1 normal.

The Truckee Basin Water Committee forecasts that Lake Tahoe should rise .85 foot from April 1 through the runoff period assuming gates closed. This rise with gates closed would allow the Lake to reach an elevation of 6226.6. On April 1 the Lake was at an elevation of 6225.75.

The Truckee River at Farad is forecast to flow 160,000 acre feet during April-July. The Little Truckee above Boca is forecast at 54,000 acre feet for the same period.

The Committee reports that Donner Lake and Boca Reservoir are expected to fill. Independence Lake is estimated to fill to 16,000 acre feet or about 91 percent of capacity.

Water supplies for irrigation along the Truckee River will be adequate but a reduced water supply for power generation during the winter of 1960-61 is anticipated.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SOURCE AND AGRICULTURE SOIL CONSERVATION SERVICE SOURCE SOURCE

RESERVOIR	USABLE	MEASURED (First of Month)				
	CAPACITI	THIS YEAR	LAST YEAR	NORMAL		
Boca	41	22	2	9		
Lake Tahoe	732	330	563	473		

Note: All normals based on 1943-195715 yeor period, "Yeors of record" indicates number of yeors used in 1943-1957 period. The forecost period is from April I through July 31.

APRIL 1, 1960

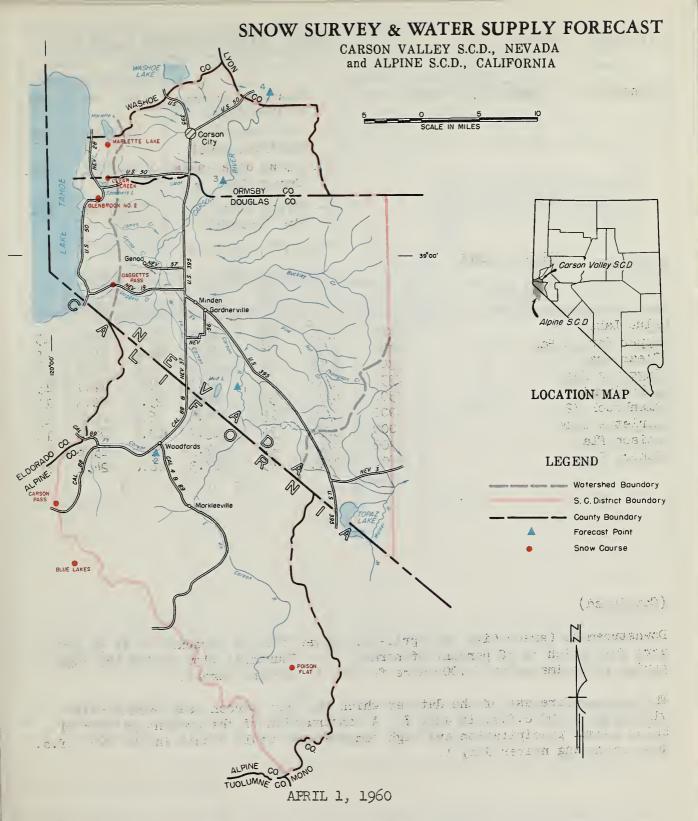
APRIL - JULY RUNOFF (1,000 Ac. Ft.)

J				
FORECAST POINT	FORECAST	MEASURED		
	THIS YEAR	LAST YEAR	NORMAL	
1. Little Truckee River above Boca	54	32	86*	
2. Truckee River at Farad, Calif.	160	109	255	
3. Lake Tahoe rise (In ft. from Apr.			1.50	
l assuming gates (Note: Above forecasts Truckee Basin Wa	prepar	ed by	e	

* Subject to change

			ENT INFORM		PAST F	VEARC	
SNOW COURSE		DATE OF	SNOW DEPTH	WATER CONTENT	WATER (Inc	CONTENT hes)	YEARS OF
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL	RECOR
AKE TAHOE							
Daggetts Pass	7350	3/27	2,	7 2	3.0	101	7.5
Echo Summit				1.3	1.9	12.1	15
Freel Bench	7500	4/1	55	26.0	25.3	40.3	15
a.	7300	3/31	8	2.6	2.2	11.7	14
Glenbrook #2	6900	3/27	13	4.9	6.3	14.5	15
Hagens Meadow	8000	3/31	25	10.1	10.7	18.4	14
Lake Lucille	8400	4/3	114	50.5	40.5	62.9	15
Little Valley	6300	3/31	14	1.0	-	8.4	15
Marlette Lake	8000	3/30	34	13.7	13.7	23.3	15
Richardsons #2	6500	3/27	23	9.2	10.0	17.8	14
Rubicon #1	8100	3/26	97	39.8	32.7	50.6	14
Rubicon #2	7500	3/26	46	20.8	17.9	31.7	14
Rubicon #3	6700	3/26	32	13.5	12.2	21.4	14
Tahoe City	6250	3/29	5	1.7	0.5	11.4	15
Upper Truckee	6400	3/31	2	0.6	0.8	7.7	14
Ward Creek	7000	4/1	87	38.1	28.0	46.7	14
RUCKEE RIVER Boca #2 Donner Park #2 Donner Summit Fordyce Lake Fürnace Flat Independence Camp Independence Creek Independence Lake Mt. Rose Sage Hen Creek Squaw Valley #2 Truckee #2 Webber Lake Webber Peak	5900 6000 6900 6500 6600 7000 6500 8450 9000 6500 7500 6400 7000	3/26 3/26 3/25 4/4 4/1 4/4 4/4 4/3 3/28 3/29 3/28 Repc 3/28	T 26 57 62 36 11 79 69 34 99 24 rt dela	T 12.3 28.6 34.2 38.6 15.2 35.2 30.3 12.4 43.2 8.7 yed 33.6	0.0 12.1 24.5 25.4 28.3 10.2 5.2 29.4 24.6 13.2 36.7 6.8 18.7 26.2	4.8 - 39.7 41.2 47.2 15.5 41.9 34.9 15.6 33.9 43.9	13 0 15 15 15 15 15 15 15 14 14 15
.ii.		, v.		in en	11 2	(25) 12 - 27 10 0 20 - 180 10 - 27 158	

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Snowfall was below normal during March in the Carson River portion of the Sierras. Usually the snowpack increases 22 percent in March; this year it only increased 15 percent. At key snow courses the snowpack is now 77 percent of the April 1 normal.

Assuming normal spring precipitation and taking into account the dry soil conditions the East Carson near Gardnerville is forecast to flow 115,000 acre feet during April-July or 61 percent of normal. The West Carson at Woodfords is forecast at 35,000 acre feet or 65 percent normal for the same period. (Over)

RESERVOIR	USABLE	MEASURED (First of Month)							
	CAPACITY	THIS YEAR	LAST YEAR	NORMAL					
Lahontan	286	158	254	229					

Note: All normals based on 1943-195715 year period. "Years of record" indicates number of years used in 1943-1957 period. The forecast period is from April I through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

		FORECAST POINT	FORECAST	MEAS	URED
Į			THIS YEAR	LAST YEAR	NORMAL
	1.	East Carson near Gardnerville	115	96	189
	2.	West Carson at Woodfords, Calif.	35	27	54
	3.	Carson River near Carson City	95	55	184
	4.	Carson River at Fort Churchill	75	40	171

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CNIOW/ APRIL 1, 1960

SNOW		CURRENT INFORMATION			PAST F		
SNOW COURSE	5. 5./AT.04	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (inches)	WATER (Inc	CONTENT hes) NORMAL	YEARS OF RECORD
NAME	ELEVATION	SORVET	(inches)	(menes)	LAST TEAR	NORMAL	RECOND
Blue Lakes Upper Carson Pass Clear Creek Daggetts Pass Echo Summit Glenbrook #2 Marlette Lake Poison Flat Sonora Pass	8000 8600 7300 7350 7500 6900 8000 7900 8800	3/31 3/31 3/27 4/1 3/27 3/27 3/30 4/2 3/29	63 58 9 45 55 13 34 20 45	23.8 25.9 3.1 1.3 26.0 4.9 13.7 9.5 17.3	23.1 26.2 7.2 1.9 25.3 6.3 13.7 9.0 16.0	36.1 35.4 14.8 12.1 40.3 14.5 23.3 15.8 24.1	15 15 9 15 15 15 15 15

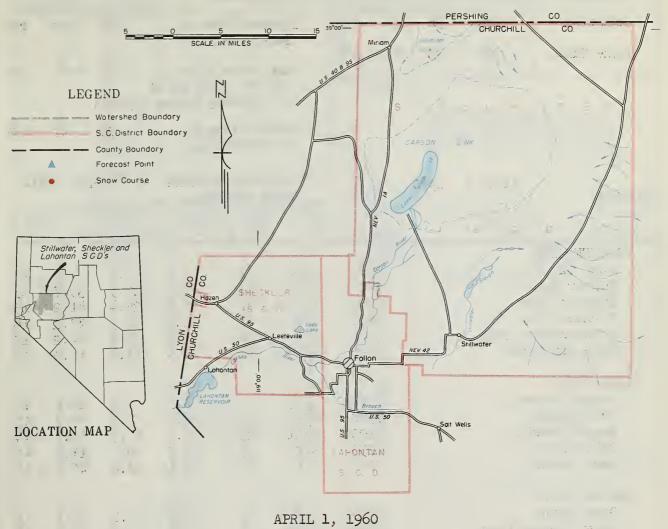
(Continued)

Downstream at Carson City the April-July river flow is forecast to be 95,000 acre feet which is 52 percent of normal. Ft. Churchill flow during the same period is estimated at 75,000 acre feet or 44 percent normal.

The revised forecast of the date at which the East Carson near Gardnerville will drop to 200 c.f.s. is July 7. A continuation of the present pattern of below normal precipitation and high temperatures would result in the 200 c.f.s. date occurring nearer July 1.

SNOW SURVEY & WATER SUPPLY FORECAST

STILLWATER, SHECKLER, LAHONTAN S.C.D's. & VICINITY CHURCHILL COUNTY, NEVADA



The water supply outlook for water users in the Fallon Area has not improved as a result of the March snowfall in the Sierra watersheds which provide water to Lahontan Reservoir. With careful and efficient water management by water users the water supply should be sufficient to avoid any serious crop damage.

Lake Tahoe is expected to rise .85 foot from April 1 through the runoff season or 57 percent of the 1943-57 normal. Present storage in Lake Tahoe is 300,000 acre feet which is 70 percent of the April 1, 1943-57 normal.

The Carson at Ft. Churchill is forecast to flow 75,000 acre feet during April-July or 44 percent normal.

Lahontan Reservoir held 158,000 acre feet on April 1 which is 69 percent of the 15 year (1943-57) normal. This is a gain of 21,000 acre feet over last months reading of 127,000 acre feet.

July 31.

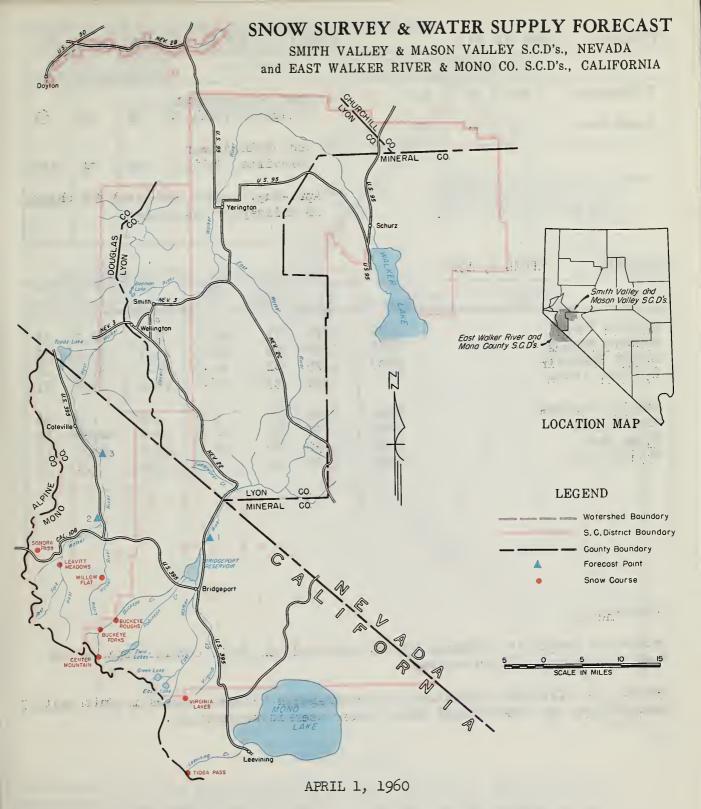
APRIL - JULY RUNOFF (1,000 Ac. Ft.)

· ·						· · · · · · · · · · · · · · · · · · ·				
RESERVOIR	USABLE CAPACITY		JRED (First o		ſ	FORECAST POINT	FORECAST THIS YEAR		URED	
Lahontan	28		-		9	Truckee River at Farad, Calif.*	16			5
Lake Tahoe	73	2 33	0 56	3 473	3	Lake Tahoe rise*	0.8	5 0.4	4 1.5	0
		105715				(In ft. from April assuming gate		d)		
Note: All normals base period, "Years of a of years used in a forecast period in	record" ind 1943 - 1957	icotes num 7 period.	ber The			Carson River at Ft. Churchill	7	5 4	0 17	L

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*Forecasts prepared by Truckee Basin

SNOW APRIL 1, 1960	Water Committee CURRENT INFORMATION PAST RECORD					Basin	
SNOW COURSE		DATE	SNOW OEPTH	WATER	WATER C	ONTENT	YEARS OF
NAME	ELEVATION	OF SURVEY	(Inches)	CONTENT (Inches)	LAST YEAR	NORMAL	RECORO
TRUCKEE RIVER Boca #2 Donner Summit Fordyce Lake Furnace Flat Independence Camp Sage Hen Creek	5900 6900 6500 6600 7000 6500	3/26 3/25 4/4 4/1 4/4 3/28	57 62 81 36	T 28. 34. 38. 15.	25.4 6 28.3 6 10.2	39.7 41.2 47.3 24.3	15 2 15 2 14 2 15
LAKE TAHOE Daggetts Pass Echo Summit Hagans Meadow Tahoe City Ward Creek	7350 7500 8100 6250 7000	3/27 4/1 3/31 3/29 4/1	55 25	1. 26. 10. 1. 38.	0 25.3 1 10.7 7 0.5	12.1 40.3 18.4 11.4 46.7	
CARSON RIVER Blue Lakes Upper Carson Pass Clear Creek Poison Flat	8000 8600 7300 7900	3/31 3/31 3/31 4/2	. 263 58 - 9 - 20	23. 25. 3. 9.	8 23.1 9 26.2 7.2 9.0	36.1 35.4 14.8 15.8	15 15 9 15
	. :		n gerja	•	4.		-



Limited March storms did not improve this coming summers water supply outlook for water users on the Walker River system. The mountain snow pack is now 66 percent of the April 1 1943-57 normal. Usually 15 to 20 percent of the winter snowpack is deposited in March. This year 11 percent was received.

The forecast has been revised downward for the East Walker. The East Walker at Bridgeport is now forecast to flow 25,000 acre feet during the April-August runoff period. The West Walker is forecast to flow 86,000 acre feet during April-July which is the same as given last month.

(Over)

APRIL - JULY RUNOFF (1,000 A	c. Ft.
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RESERVOIR	USABLE	MEASURED (First of Month)				
	CAPACITY	THIS YEAR LAST YEAR		NORMAL		
Bridgeport	7+5	23	43	35		
Topaz Lake	59	18	57	45		

APRIL - JULI RUNG	11 (1,	000 110	rt./		
FORECAST POINT	FORECAST	MEASURED			
	THIS YEAR	LAST YEAR	NORMAL		
1. East Walker* near Bridgeport, Calif.	25	18	61		
2. West Walker near Coleville, Calif.	86	81	148		
* AprAug. runoff co in Bridgeport Reser	rrecte voir	d for	change		

1 840 21,89 141

Note: All normals bosed on 1943-195715 year period, "Years af record" indicates number of years used in 1943-1957 period. The forecast period is from April I through July 31.

SNOW/ APRIL 1, 1960

3110 W		CURRENT INFORMATION			PAST P		
SNOW COURSE NAME ELEVAT		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER (Inc	CONTENT hes) NORMAL	YEARS OF RECORD
Buckeye Forks	8500	3/2 ¹ 4	33	12.6	13.9	20.1	14
Buckeye Roughs	7900	3/2 ¹ 4	29	12.3	13.4	20.4	15
Center Mountain	9400	3/25	61	24.6	27.3	37.7	14
Virginia Lakes	9500	3/28	39	12.6	12.1	17.8	11
Leavitt Meadows	7200	3/29	ц	0.8	1.0	7.0	14
Sonora Pass	8800	3/29	45	17.3	16.0	24.1	15
Tioga Pass	9900	3/30	40	16.0	12.4	24.9	15
Willow Flat	8250	3/28	18	6.8	6.4	9.9	14

(Continued)

Bridgeport Reservoir contained 23,000 acre feet on April 1 while Topaz on the same date held 18,000 in storage.

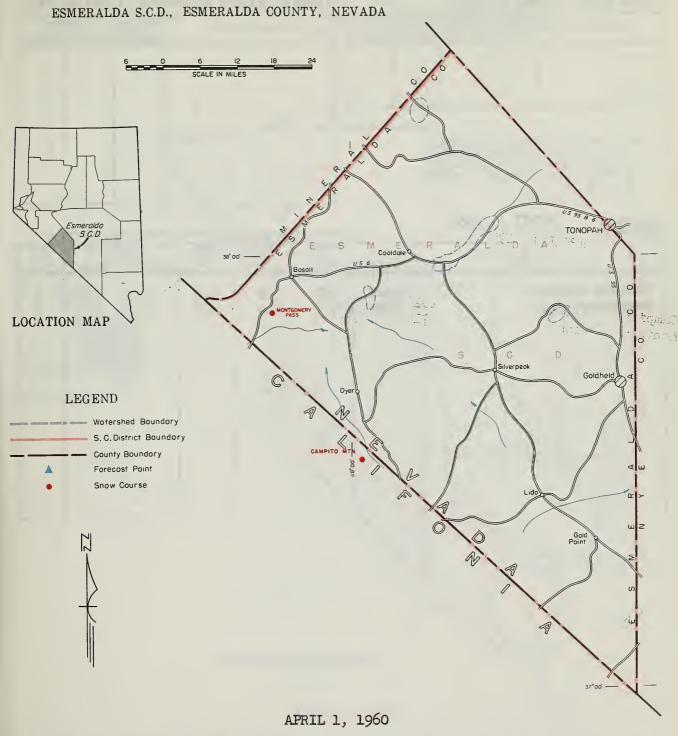
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Careful and efficient irrigation water management by water users in Smith Valley, Mason Valley and other Walker River water users is recommended.

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SNOW SURVEY & WATER SUPPLY FORECAST



The snow cover in the White Mountains is below last year. There are snow patches at higher elevations with heavier snow patches and pockets on the east slopes of the White Mountains.

Mountain soils are dry and will use most of the snow-stored water. Little runoff is expected with little recharge of ground water in Fish Lake Valley.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

RESERVOIR	USABLE	MEASU	RED (First o	f Month)	FORECAST POINT	FORECAST	MEASU	JRED
	CAPACITI	THIS YEAR	LAST YEAR	NORMAL		THIS YEAR	LAST YEAR	NORMAL
Note : All normols bos period. "Yeors of	sed on 1943	i-195715 yı	ear ber					

of years used in 1943-1957 period. The forecost period is from April I through July 31.

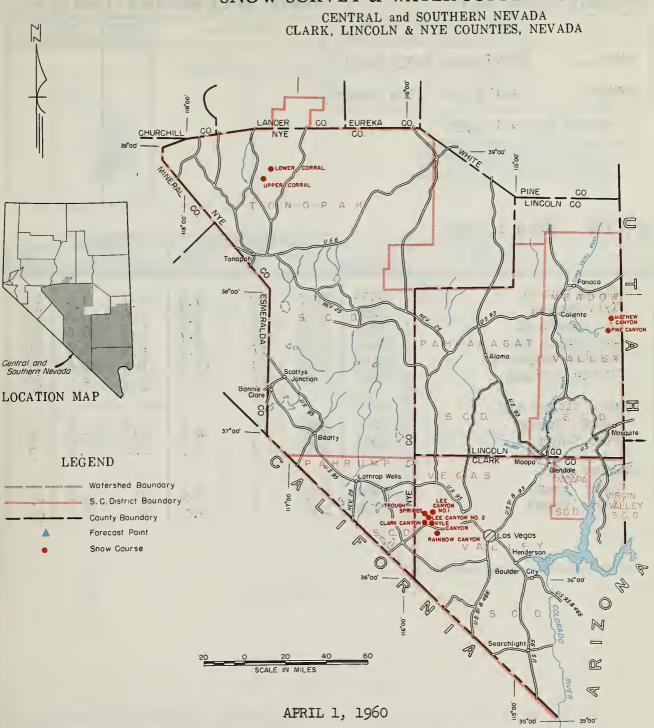
CNIOW/ APRIL 1, 1960

10200	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER (Inc	CONTENT hes) NORMAL	YEARS OF RECORE
10200			(inches)	LAST YEAR	NORMAL	RECORI
	4/1					
	1 T/ 1	()	0.0	20		
		0		2.9	-	0
7100	4/1	0	0.0	0		0
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	100	7100 4/1	4/1 0	4/1 0 0.0		

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The soils are dry . . will use most of sover a reveal about the his solution of the solution sale.

SNOW SURVEY & WATER SUPPLY FORECAST



Snow cover in the Spring Mountains near Las Vegas is about 70 percent of the April 1, 1943-57 average. Ground water recharge from the snowpack should be good this year.

Two snow courses on Clover Creek, a tributary to Meadow Valley Wash, were measured. Mathew Canyon reported 1.1 inches of water and Pine Canyon 0.3 inch of water. This is a little below last year. Soils have been fairly well primed by March snow melt but range conditions will be only fair unless spring precipitation occurs in near normal amounts.

In the upper end of Reese River in northern Nye County two snow courses were found bare. Only fair runoff can be expected in this area.

APRIL -	JULY	RUNOFF	(1,000 Ac.	Ft.
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RESERVOIR	USABLE	MEASURED (First of Month)				
	CAPACITY	THIS YEAR	LAST YEAR	NORMAL		
Mead	27217	19171	20735	16437		
Mohave	1810	1568	1703	1492*		

FORECAST POINT	FORECAST	MEASURED		
	THIS YEAR	LAST YEAR	NORMAL	

* Storage began in 1950

Note: All normols based on 1943-195715 year period, "Years of record" indicates number of years used in 1943-1957 period. The forecast period is from April I through July 31.

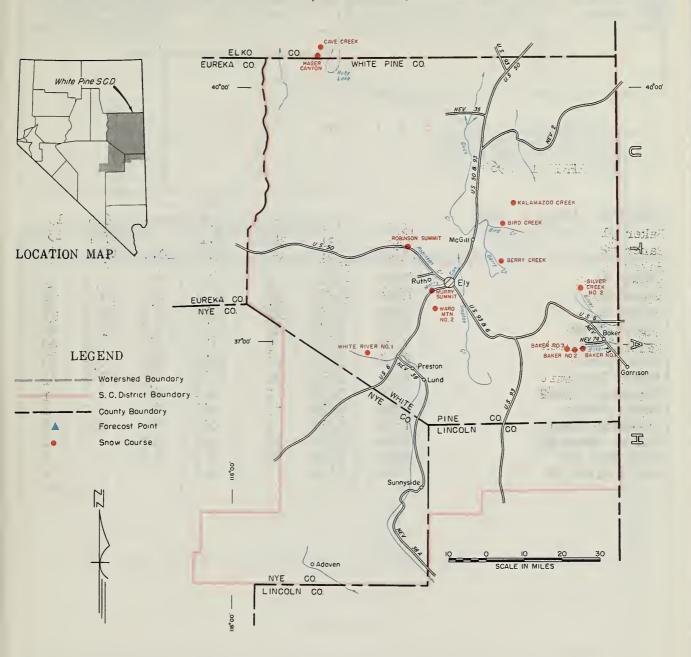
CNOW/ APRIL 1, 1960

3110 W APRIL 1, 1900		CURRENT INFORMATION PAST R				ECORD	
SNOW COURSE NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER (Inc	CONTENT hes) NORMAL	YEARS OF RECORD
Clark Canyon Kyle Canyon Lee Canyon #1 Lee Canyon #2 Rainbow Canyon #2 Trough Springs	9000 8200 8300 9000 8100 8500	3/27 3/31 3/30 3/27 3/31 3/26	22 9 9 17 28 17	7.9 3.6 3.7 6.7 10.3 6.0	4.7 5.6 4.3 5.4 10.5 2.2	7.8 9.0 8.0 9.0 15.0	13 14 15 14 11
MEADOW VALLEY SCD Mathew Canyon Pine Canyon	6200 6000	3/26 3/27	4 3	1.1	1.2	0.5	9
TONOPAH SCD Lower Corral Upper Corral	7500 8500	3/29 3/29	0	0.0	T T	1.6	14 13

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SNOW SURVEY & WATER SUPPLY FORECAST

WHITE PINE S.C.D., WHITE PINE, LINCOLN & NYE COUNTIES, NEVADA



APRIL 1, 1960

Irrigation water supplies in White Pine Soil Conservation District will be better than last year but less than normal. The present snowpack is about 63 percent of normal.

Soil under the snowpack is dry and will use some of the snowmelt water before runoff begins.

Only fair runoff from streams in this area can be expected. If spring precipitation is normal range conditions should be fair to good.

RESERVOIR	USABLE	MEASURED (First of Month)				
	CAPACITI	THIS YEAR	LAST YEAR	NORMAL		

Note: All normols bosed on 1943-195715 yeor period, "Yeors of record" indicates number of years used in 1943-1957 period. The forecost period is from April I through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

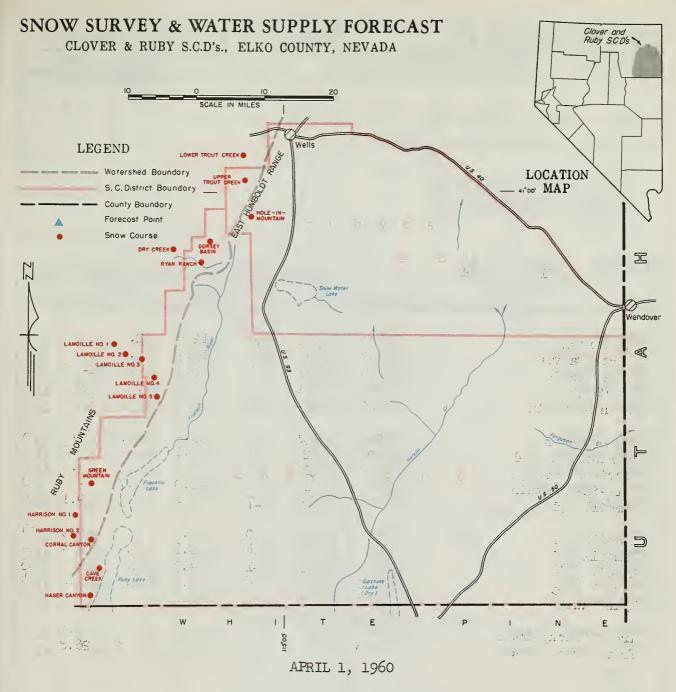
FORECAST POINT	FORECAST	MEASURED		
	THIS YEAR	LAST YEAR	NORMAL	

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SNOW APRIL 1, 1960

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5110 W AINIH 1, 1900		CURRENT INFORMATION PAST RECORD					
SNOW COURSE NAME ELEVATION		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)		CONTENT hes) NORMAL	YEARS OF RECORD
Baker #1 Baker #2 Baker #3 Berry Creek Bird Creek Cave Creek Hager Canyon Kalamazoo Creek Murry Summit Robinson Summit Silver Creek #2 Ward Mtn. #2 White River #1	7950 8950 9250 9100 7500 7500 8000 7400 7250 7600 8900 7400	3/31 3/31 3/28 3/28 3/28 3/31 3/31 3/30 3/29 3/29 3/29 3/29	9 34 38 35 3 29 35 7 0 10 26 0	3.0 11.1 13.6 10.9 1.0 12.5 15.4 2.6 0.0 0.0 4.1 8.7 0.0	4.95.1.9 4.96 5.4 9.0.9 T.26 3.T T.38 0	6.5 17.7 19.3 16.9 3.4 15.6 21.9	15 15 15 10 10 13 13 - 15 8 1



April 1 snow surveys indicate that the water content of the snow on the west side of the Ruby Mountains has decreased since March 1 and is now 59 percent of the April 1, 1943-57 normal. Snow courses below 7700 feet in elevation lost snow water while courses above this elevation gained in water content. The increases at these higher courses was about 85 percent of the normal March increase.

Streams flowing from the eastern slope of the Ruby Mountains will run about 55 to 60 percent of average.

Range conditions will be fair and can improve should ample spring rainfall occur before the snow-primed soils dry out.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

						 2
	RESERVOIR	USABLE CAPACITY		IRED (First o	f Month)	FORECA
		CAPACITI	THIS YEAR	LAST YEAR	NORMAL	
ļ						

FORECAST POINT	FORECAST	MEAS	URED
	THIS YEAR	LAST YEAR	NORMAL

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Note: All normols bosed an 1943-195715 year period, "Yeors of record" indicates number of years used in 1943-1957 period. The forecast period is from April I through July 31,

APRIL 1, 1960

SNOW

Trout Creek, Lower

Trout Creek, Upper

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0210 11 111111 1, 1900		CURR	ENT INFORMA	ATION	Y PAST F	RECORD	1
SNOW COURSE		OATE OF SURVEY	SNOW OEPTH (Inches)	WATER CONTENT (Inches)	(Inc		YEARS OF RECORO
NAME	ELEVATION	SURVET	(Inches)	(Inches)	LAST YEAR	NORMAL	RECORD
Cave Creek Corral Canyon Dorsey Basin Dry Creek Green Mountain	7500 8500 8100 6500 8000	3/31 3/30 3/31 3/31 3/29	29 38 30 1 28	12.5 13.7 10.9 T 9.6	2.4 11.8 9.4 0 8.3	15.6 19.4 14.7 3.6 13.1	13 12 14 14 12
Hager Canyon Harrison Pass #1 Harrison Pass #2 Hole-in-Mountain Lamoille #1	8000 6600 7400 7900 7100	3/31 3/29 3/29 4/1 3/29	35 0 T 66 17	15.4 0.0 T 26.0 5.4	6.9 T 1.3 7.7 7.3	21.9 3.0 4.3 - 10.1	13 14 14 0 14
Lamoille #2 Lamoille #3 Lamoille #4 Lamoille #5 Ryan Ranch	7300 7700 8000 8700 5800	3/29 3/28 3/28 3/28 3/31	20 34 41 56 0	6.3 10.8 14.3 21.2	7.6 8.6 11.9 18.6	9.9 13.4 19.7 29.2	14 14 13 14 14

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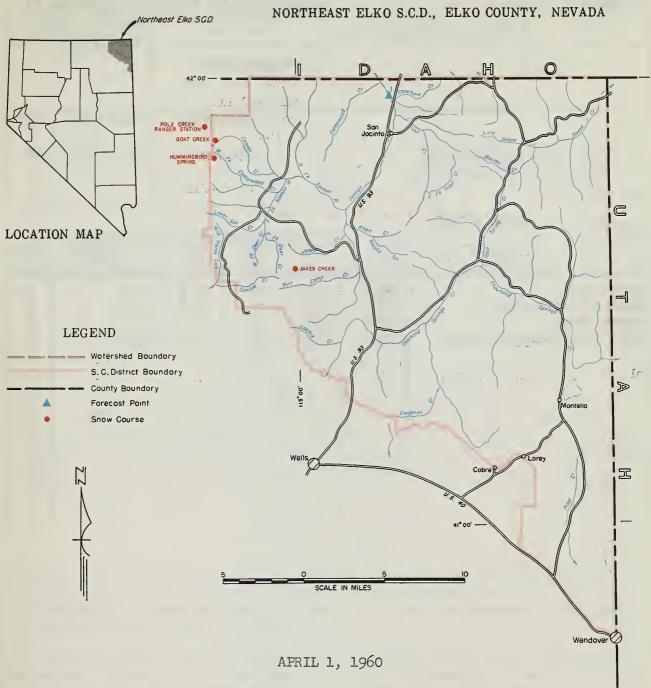
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SNOW SURVEY & WATER SUPPLY FORECAST



The mountain snowpack in the head waters of Salmon Falls Creek has improved over that of last months March 1 surveys. This years April 1 snowpack is 114 percent of last year.

Soils have increased in moisture content but still require additional water to reach field capacity.

Salmon Falls Creek near San Jacinto is forecast to flow 58,000 acre feet during March-July which is 68 percent of normal. About 8,000 acre feet of water passed the gaging station at San Jacinto during March.

Range condition should be fair to good if spring precipitation is near normal.

Careful and efficient irrigation water management will pay dividends in water

APRIL -	JULY	RUNOFF	(1,000 Ac	. Ft.)
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CAPACITY THIS YEAR LAST YEAR NORMAL 1. Salm Cree							
1. Salm Cree	RESERVOIR						FO
Cree		CAPACITY	THIS YEAR	LAST YEAR	NORMAL		
						1.	Salm Cree Jaci

HIRIE JOZI RONO				
FORECAST POINT	FORECAST	MEASURED		
	THIS YEAR	LAST YEAR	NORMAL	
l. Salmon Falls Creek near San Jacinto		TA20		
March-Sept.	60	87	88	
March-July	58	84	85	

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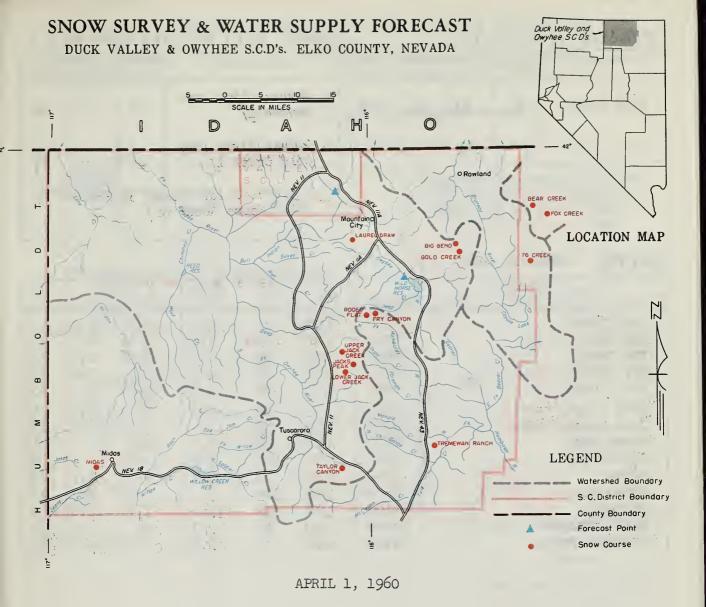
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Nate: All narmals based on 1943-195715 year period, "Years of record" indicates number of years used in 1943-1957 period. The forecast period is from April I through July 31.

SNOW

APRIL 1, 1960

3110 W		CURR	ENT INFORMA	ATION	PAST F	RECORD	1
SNOW COURSE NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER (inc	CONTENT hes) NORMAL	YEARS OF RECORD
Goat Creek Hummingbird Springs Jakes Creek Pole Creek Ranger Station	8800 8945 7000 8330	3/29 3/29 3/31 3/29	46 57 1 50	15.8 18.8 T 18.1	14.2 16.0 - 15.9	-	3 0 3



April 1 snow surveys in the Owyhee watershed indicate that snow courses at elevations below 6700 feet have lost some of their snow-stored water. Above this elevation the snowpack has increased, with about 140 percent of the normal March increase being observed.

As a result of this increase at the higher elevation snow courses which are the better indicators of streamflow, the forecast of the Owyhee near Gold Creek has been revised upward to 16,000 acre feet during April-July or 59 percent normal. Likewise, Owyhee near Owyhee is forecast to flow 55,000 acre feet during the same period which is 64 percent of normal (1943-57).

Wildhorse Reservoir contained 13,000 acre feet on April 1, which was a gain of 3,000 acre feet during March. Wildhorse is not expected to fill. However careful irrigation water management by water users will be most beneficial in water saved.

Range conditions will only be fair although recent rainfall at lower elevations has improved the outlook. Continued rainfall during April and into May before the soils dry out would improve the range condition outlook more favorably.

RESERVOIR	USABLE	MEASURED (First of Month)			
	CAPACITI	THIS YEAR	LAST YEAR	NORMAL	
Wild Horse	33	13	23	17	

NOTE: All normals based on 1943-195715 year period. "Yeors of record" indicotes number of years used in 1943-1957 period. The forecast period is from April I through July 31.

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APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEAS	URED
	THIS YEAR	LAST YEAR	NORMAL
1. Owyhee River near Owyhee 1/	55	16	86
2. Owyhee River near Gold Creek 1/	16	7	27
l/ Corrected for char Wild Horse Reserve		stora	ge in

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SNOW/ APRIL 1, 1960

3110 W		CURR	ENT INFORM	ATION	PAST R	ECORD	
SNOW COURSE NAME ELEVATION		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER (YEARS OF RECORO
Bear Creek Big Bend Fox Creek Fry Canyon Gold Creek	7800 6700 6800 6700 6600	3/28 3/25 3/28 3/25 3/25	52 22 26 16 14	19.4 7.6 8.3 6.3 4.8	18.8 5.4 5.9 T	21.3 10.5 8.3 9.2 6.0	13 15 13 15
Jack Creek, Lower Jack Creek, Upper Jacks Peak Leurel Draw Midas	6800 7250 8420 6700 7200	3/23 3/23 3/23 3/30 3/28	12 30 68 18	4.5 11.4 23.5 6.0 0.6	T 6.1 18.5 4.8	2.5 10.9 - 1.7	15 15 1 0
Rodeo Flat 76 Creek Taylor Canyon Tremewan Ranch	6800 7100 6200 5700	3/25 3/24 3/23 3/25	16 29 13 0	6.5 11.0 4.7 0.0	0.9 7.7 0	8.7 12.0 3.5 0.8	15 9 15 15

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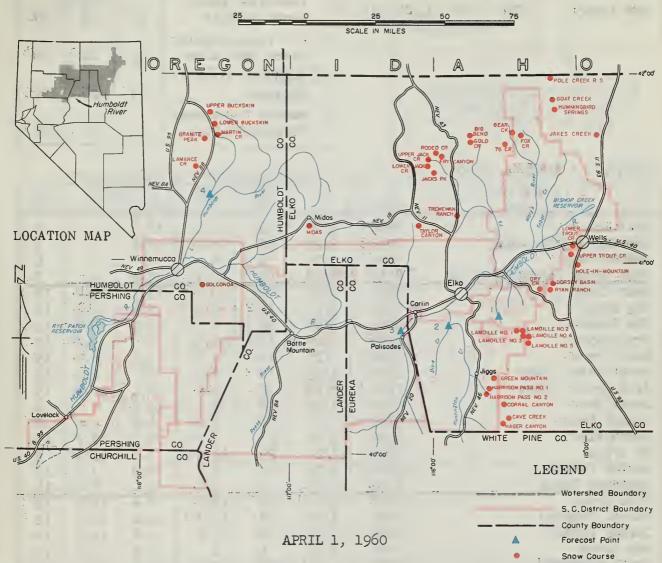
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SNOW SURVEY & WATER SUPPLY FORECAST

HUMBOLDT RIVER CHURCHILL, ELKO, EUREKA, HUMBOLDT, LANDER & PERSHING COUNTIES, NEVADA



A low water year continues to be in prospect for many water users along the Humboldt. Although March snowfall was normal to near normal at many high elevation snow courses in the Humboldt basin many lower elevation snow courses lost water during the month.

Due to the still existant dry soil conditions and the below average snow pack the Humboldt at Palisade is now forecast to flow 45,000 acre feet during April-July or 20 percent of normal.

The South Fork of the Humboldt River near Elko is forecast at 35,000 acre feet or 47 percent of the April-July 1943-57 normal.

Lamoille Creek near Lamoille is forecast to flow 18,000 acre feet during April 1 through July 31 or 64 percent of normal.

Rye Patch Reservoir contained 28,000 acre feet on April 1 which is 24 percent of normal (1943-57).

Lovelock Valley water users will have to continue their careful irrigation water management practices in order to obtain full efficiency from the limited water supply in prospect.

RESERVOIR	USABLE	MEASURED (First of Month)				
	CAPACITI	THIS YEAR	LAST YEAR	NORMAL		
Rye Patch	179	28	123	115		

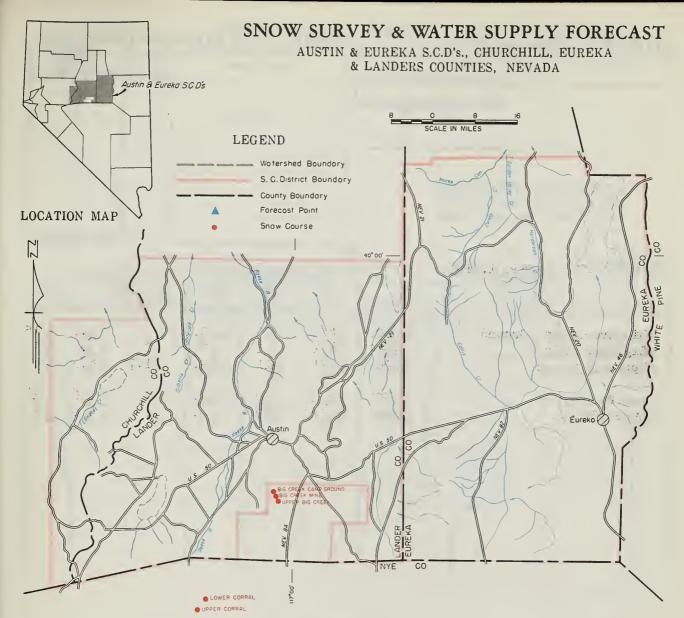
Note: All normals bosed on 1943-195715 year period, "Years of record" indicates number of years used in 1943-1957 period. The forecost period is from April I through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT		FORECAST	MEAS	
		THIS YEAR	LAST YEAR	NORMAL
1.	Lamoille Creek near Lamoille	18	13	28
2.	So. Fork Humboldt River near Elko	35	10	74
3.	Humboldt River at Palisade	45	20	225
4.	Martin Creek near Paradise Valley	12	6	17

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SNOW APRIL 1, 1960			ENT INFORM			RECORD		,
SNOW COURSE		DATE OF	SNOW DEPTH	WATER CONTENT	WATER CONTENT (Inches)		YEARS OF	
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL	RECORD	
Goat Creek	8800	3/29	46	15.8	14.2	-	3	
Hummingbird Springs	8945	3/29	57	18.8	16.0	_	3	
Jakes Creek	7000	3/31 -	1	T	-	-	0	
Pole Creek Ranger Station	8330	3/29	50	18.1	15.9	-	3	
Bear Creek	7800	3/28	52	19.4	18.8	21.3	13	
Big Bend	6700	3/25	22	7.6	5.4	10.5	15	
Fox Creek	6800	3/28	26	8.3	5.9	8.3	13	
Fry Canyon	6700	3/25	16	6.3	T	9.2	15	
Gold Creek	6600	3/25	14	4.8	2.8	6.0	15	
Jack Creek, Lower	6800	3/23	12	4.5	T	2.5	15	
Jack Creek, Upper	7250	3/23	30	11.4	6.1	10.9	15	
Jacks Peak	8420	3/23	68	23.5	18.5	-	i	
Laurel Draw	6700	3/30	18	6.0	4.8	-	0	
Rodeo Flat	6800	3/25	16	6.5	0.9	8.7	15	
76 Creek	7100	3/24	29	11.0	7.7	12.0	9	
Taylor Canyon	6200	3/23	13	4.7	0.0	3.5	15	
Tremewan Ranch	5700	3/25	Ō	0.0	0.0	0.8	15	
Cave Creek	7500	3/31	29	12.5	2.4	15.6	13	
Corral Canyon	8500	3/30	38	13.7	11.8	19.4	12	
Dorsey Basin	8100	3/31	30	10.9	9.4	14.7	14	
Dry Creek	6500	3/31	1	T	0.0	3.6	14	
Green Mountain	8000	3/29	28	9.6	8.3	13.1	12	
Hager Canyon	8000	3/31	35	15.4	6.9	21.9	13	1 11
Harrison Pass #1	6600	3/29	0	0.0	\mathbf{T}_{γ_i}	3.0	14	100
Harrison Pass #2	7400	3/29	T	T	1.3	4.3	14	
Hole-in-Mountain	7900	4/1	66	26.0	7.7	-	0	
Lamoille #1	7100	3/29	17	5.4	7.3	10.1	14	
Lamoille #2	7300	3/29	20	6.3	7.6	9.9	14	
Lamoille #3	7700	3/28	34	10.8	8.6	13.4	14	1
Lamoille #4	8000	3/28	41	14.3	11.9	19.7	13	
Lamoille #5	8700	3/28	56	21.2	18.6	29.2	14	
Ryan Ranch	5800	3/31	0	.0.0	0.0	1.0	14	49.1
Trout Creek, Lower	6900	4/1	1	0.2	T	2.7	11	
Trout Creek, Upper	8500	4/1	1 5	1.8	13.0	26.8	11	
Midas	7200	3/28	2	0.6.	1.10.0	1.7	13	
Golconda #2	6000	3/28	0	0.0	T	-	0 0	. :
Buckskin, Lower	6700	3/29	14	6.0	5.9	8.0	14	
Buckskin, Upper	7200	3/29	22	9.9	7.4	9.0	14	115
Granite Peak	7800	3/30	28	10.8	10.9	11.3	14	5
Lamance Creek	6000	3/30	19	8.4	4.0	8.0	13	,
Martin Creek	6700	3/29	<u> </u>	8.6	7.7	7.4	_ يادا	



APRIL 1, 1960

Snow surveys in the Toiyabe Mountains indicate that the snow is rapidly melting. The snow line is now at 7500 feet. Upper Big Creek snow course has a water content of 2.9 inches or 35 percent normal. Last month this course reported 4.3 inches.

Early season streamflow is anticipated to be fair. Late season supplies will depend on rainfall received during the spring and summer months.

On the upper Reese River the slightly above normal snowpack of March 1 has melted. Only fair runoff can be expected in this area.

Soil conditions have been improved due to inflow of snow melt water.

Range conditions will be fair and could improve if spring rainfall occurs in sufficient amounts before the soils primed by snowmelt dry out.

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RESERVOIR	USABLE	MEASURED (First of Month)				
	CAPACITY	THIS YEAR	LASTYEAR	NORMAL		
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Note: All normals bosed on 1943-195715 year period. "Yeors of record" indicates number of years used in 1943-1957 period. The forecost period is from April I through July 31.

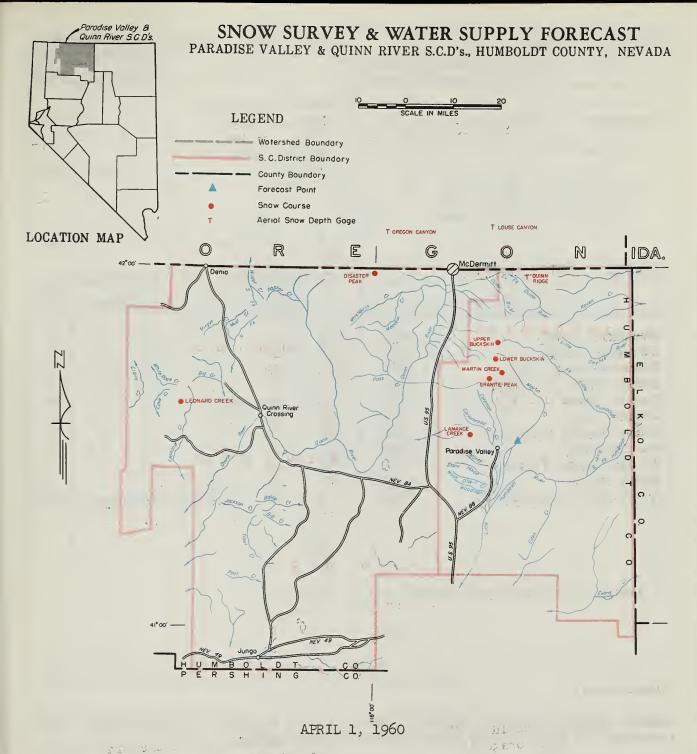
APRIL - JULY RUNOFF (1,000 Ac. Ft.)

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	FORECAST POINT	FORECAST	MEAS	URED
		THIS YEAR	LAST YEAR	NORMAL
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1				
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SNOW APRIL 1, 1960

3110 W APRIL 1, 1960	CURR	ENT INFORM	ATION	PAST F	RECORD	
SNOW COURSE NAME ELEVATION	OATE OF SURVEY	SNOW OEPTH (Inches)	WATER CONTENT (Inches)	WATER (Inc	CONTENT hes) NORMAL	YEARS OF RECORO
Big Creek Camp Ground 6600 Big Creek Mine 7600 Upper Big Creek 8000 Lower Corral 7500 Upper Corral 8500	4/1 4/1 4/1 3/29 3/29	0 T 11 0 0	0.0 T 2.9 0.0 0.0	O O D.7	1.6 3.2 8.2 1.6 4.0	15 13 13 14 13

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THE THE TALK OF IS TO VOLUME OF THE	out the layed and then canal
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Water users in Paradise Valley can expect a fair water supply during the coming irrigation season. Martin Creek near Paradise is forecast to flow 71 percent of normal or 12,000 acre feet during April 1 through July 31.

Other streams heading in the Santa Rosas should have similar flows to that of Martin Creek.

Dry soils are expected to remove sizable quantities of water from the melting snowpack. This snowpack is now 91 percent of its April 1 normal.

The difference between the snowpack percent of normal (91%) and the forecast of Martin Creek at 71 percent of normal represents to a large extent the loss to streamflow expected in priming the dry soils by the melting snowpack.

Plate 14

(Over)

RESERVOIR	USABLE	MEASUREO (First of Month)					
	CAPACITY	THIS YEAR	LAST YEAR	NORMAL			
Rye Patch	179	28	123	115			

NOTE: All normals based on 1943-1957 15 year period. "Yeors of record" indicates number of years used in 1943-1957 period. The forecast period is from April I through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

_				_	
	FORECAST POINT	FORECAST	MEASURED		
1		THIS YEAR	LAST YEAR	NORMAL	
	Martin Creek near Paradise Valley	12	6	17	
j	Humboldt River at Palisade	45	20	225	

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APRIL 1, 1960

51\0\w\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		CURRENT INFORMATION			Y PAST RECORO		1
SNOW COURSE		OATE OF	SNOW DEPTH	WATER CONTENT	WATER CONTENT (inches)		YEARS OF
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL	RECORO
Buckskin, Lower Buckskin, Upper Disaster Peak Denio Creek (Oregon)* Granite Peak Lamance Creek Louse Canyon (Oregon)* Martin Creek Oregon Canyon (Oregon)* Quinn Ridge* Trout Creek (Oregon)*	6700 7200 6500 6000 7800 6000 6440 6700 7240 6300 7800	3/29 3/29 4/3 3/22 3/30 3/30 4/2 3/29 4/2 4/2 3/22	14 22 19 0 28 19 3 19 12 0 24	6.0 9.9 7.9 0.0 10.8 8.4 1.3 8.6 5.2 0.0	5.9 7.4 7.5 - 10.9 4.0 0.0 7.7 4.1 0.0 3.4	8.0 9.0 12.8 - 11.3 8.0 - 7.4 -	14 9 0 14 13 0 14 0 0

Aerial snow depth gage; water content estimated

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(Continued)

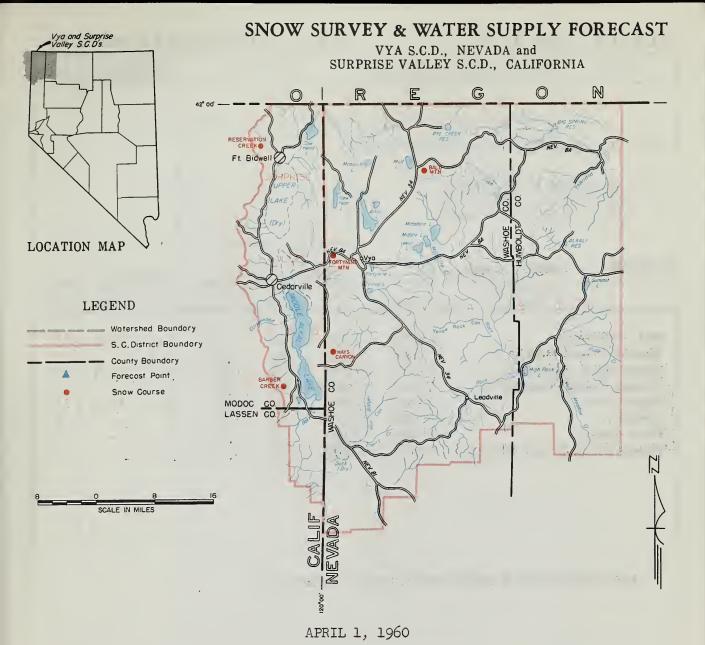
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Range conditions should be fair Normal spring rainfall, if forthcoming, will sustain the range forage later into the summer months.

Irrigation water should be carefully supervised to obtain best results. return bil.

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Water supply prospects in this area are about normal. Soils are damp and will use some of the snow-stored water before runoff occurs.

Bald Mountain on the Sheldon Antelope Refuge measured 2.3 inches of water or 74 percent of the April 1 1943-57 average. Hays Canyon and 49-Mtn. snow courses were almost bare of snow.

In the Warner Mountains, the snowpack is below normal. Cedar Pass snow course is 70 percent of April 1, 1943-57 average.

Precipitation since September is very close to normal. If normal precipitation continues most streams in Surprise Valley will flow about normal.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

RESERVOIR USABLE MEASURED (First of Month) F	ORECAS
CAPACITY THIS YEAR LAST YEAR NORMAL	

Note: All normals bosed on 1943-195715 year period. "Years of record" indicates number of yeors used in 1943-1957 period. The forecost period is fram April | Ihrough July 31.

MIRIE JOET ROTTO		000 110	/	
FORECAST POINT	FORECAST	MEASURED		
	THIS YEAR	LAST YEAR	NORMAL	

SNOW APRIL 1, 1960		CURR	CURRENT INFORMATION			PAST RECORD	
SNOW COURSE		DATE OF	SNOW DEPTH	WATER CONTENT	WATER CONTENT (Inches)		YEARS OF
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL	RECORD
Bald Mountain Barber Creek (Calif.) Cedar Pass (Calif.) Dismal Swamp (Oregon)* Eagle Peak 49-Mtn. Hays Canyon Reservation Creek (Calif.)	6720 6500 7100 7000 7200 6000 6400 5900	3/31 3/30 3/29 3/24 4/4 3/29 3/30 3/29	10 22 34 40 26 T 1 25	2.3 6.9 12.7 18.4 12.1 T 0.6 9.1	1.2 5.7 7.6 7.1 9.1 T	3.1 18.4 - 17.9	15 0 15 1 15 0 0

^{*} Aerial snow depth gage; water content estimated.

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Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

Soil Conservation Service
Forest Service
Geological Survey
Bureau of Reclamation
Fish and Wildlife Service
Army
Navy
Weather Bureau
Agricultural Research Service

STATE

Nevada Department of Conservation & Natural Resources
Division of Water Resources
Nevada State Forester-Firewarden
Nevada Cooperative Snow Surveys
Colorado River Commission of Nevada
California Cooperative Snow Surveys
California Department of Water Resources
Oregon Cooperative Snow Surveys
Nevada Association of Soil Conservation Districts

PRIVATE

Walker River Irrigation District
Amalgamated Sugar Company
Owyhee Project North Board of Control
Owyhee Project South Board of Control
Virginia City Water Company
Kennecott Copper Corporation
Squaw Valley Development Company
Pacific Gas & Electric Company
Nevada Irrigation District
Sierra Pacific Power Company
Washoe County Water Conservation District
Truckee-Carson Irrigation District
Pershing County Water Conservation District

Other organizations and individuals furnish valuable information for the snow survey reports. Their Cooperation is gratefully acknowledged.

Federal - State - Private COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"The Conservation of Water begins with the Snow Survey"